

MODIS Team Meeting Minutes

Minutes of the MODIS Team Meeting held on Tuesday November 2, 1993.

Action Items:

- 70. Evaluate the thermal design of the Schaeffer Magnetics' motor/encoder. Assigned to Daelemans 8/31/93. Due 10/15/93
- 72. Investigate the adequacy of SBRC capability to maintain temperature plateaus during instrument testing in thermal vacuum. Assigned to Daelemans 10/12/93. Due 11/ 2/93
- 73. Complete the MODIS brochure and released for printing. Assigned to Bauernschub 10/18/93. Due 11/15/93.
- 74. Prepare and submit a Configuration Change Request which revises the definition and impact of levels of software criticality for the MODIS Software Management Requirements Document. Assigned to Anderson 10/26/93. Due 12/ 1/93
- 75. Determine if the four electronic module boxes can be individually thermal tested in air, or must the thermal testing be done in a vacuum. Assigned to Silva 10/26/93. Due 11/ 9/93
- 76. Provide a schedule of the SBRC internal CDRs. Assigned to Bauernschub 10/27/93. Due 11/23/93
- 77. Transfer review and approval of Class II changes to David Jones. Assigned to Anderson 11/ 2/93. Due 11/16/93

The following items were distributed:

- 1) Weekly Status Report #111
- 2) SBRC Memos submission from week #103
- 3) Minutes of the last team meeting

Attendees:

- | | | |
|--------------------|--------------------|--------------------|
| ✓ Dick Weber | ✓ Bruce Guenther | ✓ June Tveekrem |
| ✓ John Bauernschub | ✓ George Daelemans | ✓ Bob Martineau |
| ✓ Rosemary Vail | John Barker | ✓ Bob Silva |
| Lisa Shears | Joann Harnden | Ken Brown |
| ✓ Mike Roberto | ✓ Patricia Weir | ✓ Robert Kiwak |
| Nelson Ferragut | Mitch Davis | ✓ Harvey Safren |
| Gene Waluschka | Jack Ellis | ✓ Ed Knight |
| Kate Forrest | ✓ Ken Anderson | ✓ Harry Montgomery |
| ✓ Bill Barnes | ✓ Rick Sabatino | Marvin Maxwell |
| ✓ Les Thompson | ✓ Cherie Congedo | |

MODIS Weekly Technical Report for November 2, 1993

There will not be a team meeting on November 9th. Several team members will be at SBRC for the dry run of the MODIS Critical Design Review. The dry run will run November 8 thru 10, and the dry run of the software CDR will be on November 11th.

The MODIS CDR will be at SBRC, starting on January 18th.

Comments on proposed award fee milestones for November and December are due today (November 4) to Ken Anderson by electronic mail.

The MODIS team is looking into MODIS development descopes again. The most important item for consideration within the next couple of weeks is whether or not to cut the MODIS Ground Based Calibrator. A delta PDR related to the MGBC is scheduled for November 4th at Kinsley.

Jim Young and Tom Pagano have written separate Avoid Verbal Orders (AVOs) on dropping the MGBC. Tom indicates why he believes the MGBC could be dropped, and Jim indicates why he believes the MGBC should not be dropped. Tom is very interested in keeping the Engineering Model (EM).

Tom provided inputs on the STOP elements in the MODIS pointing budget on November 3rd.

Nelson Ferragut talked with Al DeForrest on November 3rd. SBRC and El Segundo are working together on the analysis of the mainframe. SBRC is reviewing a stress report on the mainframe from El Segundo. El Segundo is reviewing material specifications on Be developed by SBRC and will put out a report in about 30 days. Recommendations from El Segundo have been incorporated into the design of the mainframe. Coupons from the HIP block of Be for MODIS show ultimate and yield stresses much higher than analysis so things are coming along well (measured stresses may have been about 80 or 90K ultimate and about 70K yield).

Gene Waluschka is at a one week course at Wallops. An optical tolerance analysis for MODIS will be done by Chen Gung of Swales.

George Daelemans is working on the thermal analysis of the motor encoder and should have results by the end of the week. SBRC is investigating using MS74 for the white paint for the radiators.

Bill Barnes is working with Phil Slater on calibration.

Bob Silva is working worst case analyses with SBRC and is still working the halogen lamp issue.

Bill Mocarsky mentioned looking into the EMI/EMC test specs for the GSE.

Bob Kiwak reviewed the interim list of SBRC's materials. SBRC has been informed of a few materials for which Bob needs more information.

Bob is working on obtaining material properties for the epoxies and detector material for the PC detector arrays so that Cherie's detector cool down stress analysis can be completed. Bob has measured the density of the 2216 epoxy and will be ready to start measuring poisson's ratio next week. Samples of the 642-1 epoxy should be ready at GSFC next week. Bob will be in contact with Mary Dowler to see if SBRC can provide material properties of the CdZnTe PC detector substrate material.

The following four inputs are from Bob Martineau:

1) PC Detectors

Completed 5 of 6 mockups. First part with large fillets had cracks (pullouts and Jbody cracks) after 10 cycles. Two parts with minimum fillets were cycled 10 times with no cracks. Above parts were not mounted to beryllium pedestals yet. More tests to come.

2) S/MWIR PV detectors (PF/F)

PV PF Lot had 4 low-doped and 4 baseline doped wafers. Test structure assemblies indicate that 2 of low-doped wafers had dead shorts, 1 was very good, and 1 gave mixed results. Of the baseline doped wafers, 3 had bad breakdowns and one gave mixed results. Probe test waiting documentation to be complete. Two more lots are planned.

3) Readouts (PF/F)

Carlsbad will close Dec 1994. Size reduction by 50% this Dec. Lots 2 and 3 will be fabricated by the end of this year. Will do wafer test through 1st 4 months of 1994 with existing team. Lot 2 restarted and plan to test 1st week of Dec.

4) Cables

Accepted 4 PC PF cables, 1 PV PF cable from Graphics Research. M-Flex had cracking of gold shield metalization. Yielded zero cables. Will have to start over. Graphics Research will be given another contract for more PF and flight cables.

Mike Roberto November 4, 1993